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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Werner Fritz DUBACH

Serial No. 10/501,178

Filing Date: 09 July 2004

Customer No.: 42419

Title: PLASTIC CLOSURE WHICH CAN  
BE PRODUCED IN A CLOSED  
MANNER, INJECTION MOULD  
AND METHOD FOR THE  
PRODUCTION THEREOF

Art Unit: 3781

Examiner:  
Christopher B. McKinley

**APPEAL BRIEF**

Mail Stop APPEAL BRIEF-PATENTS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

Appellant herewith files his Appeal Brief in the above-identified case  
under 37 CFR § 41.37, pursuant to the Notice of Appeal filed 05 October 2007.

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I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

05 December 2007

05 Dec. 2007

Date

Signature

F-336

MDS/I

**I. REAL PARTY IN INTEREST**

The real party in interest is Bericap Holding GmbH, the assignee of the present application (per the Assignments recorded at reel 016057, frame 0707, and reel 018511, frame 0099).

**II. RELATED APPEALS AND INTERFERENCES**

Appellants are not aware of any related appeals or interferences with regard to the present application.

**III. STATUS OF CLAIMS**

Claims 1-26 are pending in the application. Claims 24-26 are indicated as allowed, and Claims 15-23 are objected to, in the Advisory Action mailed 20 August 2007. The present Appeal is directed to Claims 1-14, as presented in Appendix A, which were finally rejected in the Office Action mailed 05 June 2007.

**IV. STATUS OF AMENDMENTS**

An amendment was filed subsequent to the final rejection. The Amendment placed dependent Claim 24 into independent form. The Amendment was entered, per the Advisory Action, and Claims 24-26 are now indicated as allowed.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The invention of **Claim 1** is directed to a plastic closure (1) including a lower part (2), a cap (3), and a snap hinge (4) connecting the lower part (2) and the cap (3) to one another as one piece (page 5, lines 14 - 19; FIG. 1). The lower part (2) and the cap (3) are manufacturable in a closed state and connected to one another by at least one separation seam (7) (page 5, lines 14-20; FIG. 1). All elements of the snap hinge (4) are positioned in a lateral wall region (5, 6) of the closure (1) which run parallel to a closing and opening movement direction of an injection mold, and no element of the snap hinge (4) extends outward beyond an outer surface plane of the lateral wall region (5, 6) (page 7, lines 11-17).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The grounds of rejection to be reviewed on appeal are:

1. Claims 1-3, 6-8, 13, and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by Leach, U.S. Patent No. 2,961,119; and
2. Claims 11 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Leach, U.S. Patent No. 2,961,119, in view of Stull, U.S. Patent 5,437,383.

## **VII. ARGUMENT**

### **A. Claims 1-3, 6-8, 13 and 14**

The rejection of Claims 1-3, 6-8, 13 and 14 under 35 U.S.C. §102(b) as being anticipated by Leach, U.S. Patent No. 2,961,119, should be reversed for the reasons below.

The Leach Patent does not disclose or suggest Appellant's recited snap hinge, a term that is well established in the art of closures. As is clearly visible in both FIGS. 2 and 5 of the Leach Patent, the hinge (member 17) is just a portion of material or bridge having the same thickness and extension as the lateral wall 15, and also has a rather narrow width, so that the member 17 is definitely not suited to provide any snap action.

Snap hinges move between stable positions, one of which is the closed position while the other is the open (completely open) position. Positions between open and closed are generally unstable. Upon opening a closure with a snap hinge and exceeding a certain angle (typically about 90°) between the cap and the lower closure part, the elastic forces in the hinge area are acting such that the cap will be further moved to and retained in the open position (e.g., about 180° pivot angle from the closed position between cap and lower part). With a smaller ( $< 90^\circ$ ) starting angle, the snap hinge will tend to return the cap toward the closed position.

In contrast, with the closure taught by the Leach Patent, the elastic forces acting in simple hinge 17 will always tend to return the cap toward the closed position from any open position, thereby impeding the pouring of liquids from a corresponding container if the cap is not actively retained in the open position by the fingers of the users or by any other separate means.

The final Office Action counters by stating on page 6 that “[t]he connecting portion 17 is made of elastic material which tends [to] provide a “snap action” when nearing its closed position ....” This is not supported in the art of record or by logic. As the connecting portion 17 is simply a remaining bridge of the plastic material of the cap of the Leach Patent, the elastic forces pulling the lid toward a closed position would increase the further the cap is opened. Thus if the connecting portion tends toward a position at all, it would always tend toward the closed position, and as the lid approached the closed position, the elastic forces would lessen. Therefore, the Office Action’s alleged snap action is actually opposite of what would be expected, as the closing action of the lid would actually slow as the lid moved toward the closed position, due to the lessening elastic forces. Calling the closing action of the Leach Patent a “snap action” is not reasonable in view of the prior art teachings.

Furthermore, contrary to the final Office Action, nothing Appellant said in the above remarks supports the final Office Action’s allegation. A snap hinge has a

position during opening at which past that position the cap tends toward, or “snaps” toward, the open position. It is unreasonable for the Office Action to call the Leach Patent a “snap hinge”.

As the Leach Patent does not disclose or suggest a snap hinge, the Leach Patent does not provide each and every limitation of Claim 1. Appellant respectfully requests the Board to reverse the rejections of Claims 1-3, 6-8, 13 and 14 under 35 U.S.C. § 102(b).

**B. Claims 11 and 12**

The rejection of dependent Claims 11 and 12 under 35 U.S.C. §103(a) as being unpatentable over Leach, U.S. Patent No. 2,961,119, in view of Stull, U.S. Patent 5,437,383, is respectfully traversed.

Claims 11 and 12 depend from Claim 1. The final Office Action states at page 5, that the Stull Patent teaches the limitations of Claim 1, but does not teach a snap hinge formed of two film hinges which, from one lateral limitation to an other limitation of the snap hinge, follow a course that one of centrally approach one another and diverge from one another, as in Claim 11. The final Office Action states that the Stull Patent teaches a snap hinge formed of two film hinges that follow a course that centrally approach one another and diverge from one another. The final Office Action alleges that it would have been obvious to modify the cap of the Leach Patent with the

snap hinge of the Stull Patent. The final Office Action further alleges that it also would have been obvious to modify the snap hinge of the Stull Patent so that the hinge would not extend beyond the lateral wall of the cap, as in Appellant's claimed invention. The motivation for making the Stull Patent's hinge flush, according to the Advisory Action, is to maintain the symmetrical and aesthetically pleasing form on the different, non-snap hinge of the Leach Patent.

Incorporating the snap hinge of the Stull Patent into the closure of the Leach Patent does not reasonably or predicatively provide or suggest Appellant's claimed invention. The Stull Patent teaches that the hinge 36 extends outward beyond the outer surface of the cap wall. There is no teaching or suggestion in the alleged combination to, or how to, form Appellant's snap hinge having no element of the snap hinge extending outward beyond an outer surface plane of the lateral wall region.

The Advisory Action claims that because the Leach Patent shows a hinge flush with the lateral wall, this directs the skilled artisan to modify the Stull Patent's hinge to maintain the aesthetically pleasing design. This rationale has at least the following flaws.

First, the Leach Patent doesn't seek to provide a flush hinge. The "flush" aspect of the Leach Patent's hinge is just the result of the formation of the disclosed simple "connecting portion" hinge. One of ordinary skill in the art would have readily

appreciated that the connecting portion 17 of the Leach Patent is quite a different hinge structure than the “snap-action hinge” (Abstract) of the Stull Patent.

Second, there is no direction as to how to modify the snap hinge of the Stull Patent so that it does not extend past the outer lateral wall of the closure. In order to meet Appellant’s claim limitations, the hinge of the Stull Patent must be redesigned into a different hinge. The simple material bridge hinge of the Leach Patent does not give any direction on how a more complex snap hinge can be made flush. Only Appellant’s disclosure provides the direction for making the new, modified hinge. However, considering Appellant’s Specification in this way is not proper.

Third, the change of design goes against the teaching of the Stull Patent. The Stull Patent teaches a “sealing cap”, and the “snap-action hinge is disposed completely exteriorly of the sealing surface so as to not impair the integrity of the seal provided thereby” (Abstract). Moving the hinge towards the interior goes against the teaching of the Stull Patent.

The modification of the Stull Patent hinge in order to make a rejection of Claim 11 is clearly an application of a level of hindsight that is impermissible. Whereas the hinge of the Stull Patent could perhaps be substituted for the connecting portion 17 of the Leach Patent (predicatively resulting in a cap similar to that shown in the Stull Patent, and not resulting in Appellant’s claimed invention), the alleged further



modification of the Stull Patent hinge to meet the limitations of Claim 11 can only be done using improper hindsight by considering Appellant's Specification.

Appellant respectfully requests the Board to reverse the rejections of Claims 11 and 12 under 35 U.S.C. § 103(a).

### **VIII. CONCLUSION**

For the forgoing reasons, Appellant respectfully requests the Board to reverse the rejections of Claims 1-14 under 35 U.S.C. §§ 102(b) and 103(a).

A check for the fee required by 37 CFR § 41.37(a)(2) and 37 CFR § 41.20(b)(2), in the amount of \$510.00, is attached hereto.

Respectfully submitted,



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## CLAIMS APPENDIX

1. A plastic closure comprising: a lower part, a cap and a snap hinge connecting the lower part and the cap to one another as one piece, the lower part and the cap manufacturable in a closed state and connected to one another by at least one separation seam, and all elements of the snap hinge are positioned in a lateral wall region of the closure which run parallel to a closing and opening movement direction of an injection mold, wherein no element of the snap hinge extends outward beyond an outer surface plane of the lateral wall region.

2. A plastic closure according to claim 1, wherein the lateral walls of the lower part and the cap are arranged on top of one another in a flush manner at least in a region of the snap hinge.

3. A plastic closure according to claim 1, wherein the lateral walls of the lower part and the cap lie on top of one another in a completely flush manner.

4. A plastic closure according to claim 3, wherein the lateral walls of the lower part and the cap on an outer surface are free of one of inward formations and outward formations, and inner surfaces comprise at least one of inward formations and outward formations not exceeding a wall thickness of the lateral walls.

5. A plastic closure according to claim 3, wherein the lateral walls of the lower part and the cap on the inner surface are free of one of inward formations and outward formations, and the outer surfaces have at least one of inward formations and outward formations not exceeding a wall thickness of the lateral walls.

6. A plastic closure according to claim 1, wherein the lower part and the cap are connected to one another by two separation seams which delimit a guarantee strip, and the two separation seams proceeding from a lateral limitation of the snap hinge are positioned around the closure up to at least approximately an other lateral limitation of the snap hinge.

7. A plastic closure according to claim 6, wherein the two separation seams run parallel to one another.

8. A plastic closure according to claim 6, wherein the two separation seams run in two planes perpendicular to a central middle axis of the closure.

9. A plastic closure according to claim 6, wherein the two separation seams run in planes inclined to a central middle axis of the closure.

10. A plastic closure according to claim 6, wherein the two separation seams run in planes which are differently inclined with respect to a central middle axis of the closure.

11. A plastic closure according to claim 1, wherein the snap hinge is formed of two film hinges which from one lateral limitation to an other limitation of the snap hinge follow a course that one of centrally approach one another and diverge from one another.

12. A plastic closure according to claim 11, wherein the two film hinges at a middle portion contact one another at least approximately and follow one of a curved course and a sharp bend, wherein the film hinges laterally enclose two lateral intermediate elements transmitting tensile forces.

13. A plastic closure according to claim 12, wherein the lateral limitations of the lateral intermediate elements are separated from the lateral walls by a gap.

14. A plastic closure according to claim 11, wherein the lateral limitations of intermediate elements are connected to the adjacent lateral walls by separation seams that tear on opening for a first time.

Serial No. 10/501,178

## **EVIDENCE APPENDIX**

**NONE**

**RELATED PROCEEDINGS APPENDIX**

**NONE**